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Intermountain Region

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Lost Creek–Boulder Creek Landscape Restoration Project

DRAFT ENVIRONMENTAL IMPACT STATEMENT - SUMMARY

Payette National Forest

Draft Environmental Impact Statement for the Lost Creek–Boulder Creek Landscape Restoration Project

USDA Forest Service, Intermountain Region

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Abstract

The Forest Service is analyzing proposed landscape restoration treatment activities in the 80,000 acre Lost Creek–Boulder Creek Landscape Restoration Project area on the New Meadows Ranger District of the Payette National Forest. The purpose of the proposed action is as follows:

1) Move vegetation toward the desired conditions defined in the Forest Plan and consistent with the science in the Forest's draft Wildlife Conservation Strategy.
2) Move all subwatersheds within the project area toward the desired condition for soil, water, riparian, and aquatic resources and improve the Boulder Creek subwatershed from the "Impaired" category to the "Functioning at Risk" category as described in the Watershed Condition Framework.
3) Manage recreation use in Boulder Creek and in the vicinity of Lost Creek with an emphasis on providing sanitation facilities, identifying and hardening dispersed recreation areas, and developing new trail opportunities.
4) Contribute to the economic vitality of the communities adjacent to the Payette National Forest.

The preferred alternative is Alternative B. This alternative proposes non-commercial and commercial thinning, prescribed burning, watershed improvements such as road closures, road decommissioning, and fish passage improvements, and recreation improvements including ATV/UTV trails and dispersed camping improvements. Alternative B responds to the purpose and need as stated above, and incorporates the recommendations of the Payette Forest Coalition and other concerns expressed in comment letters and public meetings.

Comments on this Draft Environmental Impact Statement (DEIS) should be postmarked or received no later than 45 days after a Notice of Availability is published in the *Federal Register* (expected on November 1, 2013). Comments should be addressed to the Payette National Forest; Attn: Holly Hutchinson, 800 West Lakeside Avenue, McCall, ID 83638, or sent electronically to comments-intermtn-payette@fs.fed.us. Electronic comments must be submitted in an email message, pdf, in plain text or another format compatible with Microsoft Word. Reviewers should provide the Forest Service with their comments during the review period. This will enable the Forest Service to analyze and respond to comments at one time and to use the information to prepare the Final Environmental Impact Statement, thus avoiding undue delay in the decision-making process. Reviewers have the obligation to structure their participation in the National Environmental Policy Act process so that it is meaningful and will alert the agency to reviewers' positions and contentions (Vermont Yankee Nuclear Power Corp. v. NRDC, 435 U.S. 519, 553, 1978). Environmental objections that could have been raised at the draft stage may be waived if not raised until after completion of the Final Environmental Impact Statements (City of Angoon v. Hodel, 9th Circuit Court of Appeals, 1986 and Wisconsin Heritages, Inc. v. Harris, 490 F. Supp. 1334, 1338 [E.D. Wis. 1980]). Comments should be specific and should address the adequacy of the statement or merits of the alternatives discussed (40 CFR 1503.3).

Summary

INTRODUCTION

This Draft Environmental Impact Statement (DEIS) discloses the temporary, short- and long-term, direct, indirect, irretrievable, irreversible, and cumulative environmental impacts of a proposed action and alternative actions for the Lost Creek–Boulder Creek Landscape Restoration Project (Lost Creek-Boulder Creek Project) on the New Meadows Ranger District of the Payette National Forest (Forest) in Adams County, Idaho. Proposed restoration activities include timber harvest, biomass harvest, temporary road construction, re-opening of closed roads, road decommissioning (obliteration), unauthorized route treatments, thinning of sub-merchantable trees, prescribed fire, fish barrier improvements, recreation improvements, and other actions described in detail in Chapter 2 of the DEIS. Proposed recreation improvements include OHV trail development, trailhead improvements, dispersed campsite improvements, and installation of vault toilets. This document has been prepared pursuant to the requirements of the National Environmental Policy Act (NEPA, 40 CFR 1500–1508); National Forest Management Act (NFMA) implementing regulations of 2005, including transition language (36 CFR 219.14); and 2003 *Payette National Forest Land and Resource Management Plan*, as amended (Forest Plan) (USDA Forest Service 2003b). Planning for the project was initiated in summer 2012.

PURPOSE AND NEED FOR ACTION

The purpose of the proposed action is as follows:

- Move vegetation toward the desired conditions defined in the Forest Plan and consistent with the science in the Forest's draft Wildlife Conservation Strategy, with an emphasis on improving and maintaining wildlife habitat for ESA-listed and sensitive species. Maintain and promote large tree forest structure, early seral species composition and forest resiliency; and reduce the risk of uncharacteristic and undesirable wildland fire, with an emphasis on restoring and maintaining desirable plant community attributes including fuel levels, fire regimes, and other ecological processes.
- Move all subwatersheds within the project area toward the desired condition for soil, water, riparian, and aquatic resources and improve the Boulder Creek subwatershed from the "Impaired" category to the "Functioning at Risk" category as described in the Watershed Condition Framework.
- Manage recreation use in Boulder Creek and in the vicinity of Lost Creek with an emphasis on providing sanitation facilities, identifying and hardening dispersed recreation areas, and developing new trail opportunities.
- Contribute to the economic vitality of the communities adjacent to the Payette National Forest.

The need for the proposed action is driven by the difference between Forest Plan desired conditions and current conditions. These differences include:

- Less large tree size class than desired in drier forest types, and higher canopy cover;
- Less early seral species (i.e. ponderosa pine and western larch);
- Less fire resilient species than desired;
- Increase in ground and surface fuels;
- Less than desired watershed function and integrity.

The desired conditions for this project are based upon the Forest Plan (USDA Forest Service 2003) the Watershed Condition Framework (USDA Forest Service 2011) and science in the draft Wildlife Conservation Strategy.

Objectives

The Purpose and Need drives the proposed action and is based on Forest Plan goals and objectives. The purpose of the proposed action is represented by six project-specific objectives. **Objectives**, as the term is used for the Lost Creek-Boulder Creek Project, are concise, time-specific statements of actions or results designed to help achieve resource-specific goals related to the Purpose and Need. In the DEIS they are tracked by measurements, which are analyzed in Chapter 3 of the DEIS. **Measurements** are resource-specific and are used to compare how each alternative meets the objectives of the Lost Creek-Boulder Creek Project.

Forested Vegetation

Objective 1: *Move vegetation toward the desired conditions defined in the Forest Plan, with an emphasis on promoting large tree forest structure, early seral species composition and forest resiliency.*

Measurements:

The following measurements will be evaluated post-treatment.

- Tree Size Class
  - Acres treated to promote or maintain the large tree size class.
  - Percentage of area (acres) in each tree size class.
- Canopy Cover
  - Percentage of area (acres) in each canopy cover class within the large tree size class.
- Species Composition
  - Acres treated to maintain and promote desired species composition.
- Spatial Patterns
  - Percent departure from reference conditions per Potential Vegetation Group.

Fire and Fuels

Objective 2: *Restore and maintain desirable fuel levels, fire regimes, and ecological processes.*

Measurement:

- Amount of departure from historic fire regimes.

Soil, Water, Riparian, and Aquatic (SWRA) Resources

Objective 3: *Move all subwatersheds within the project area toward the desired condition for SWRA resources and improve the Boulder Creek subwatershed from the "Impaired" category to the "Functioning at Risk" category as described in the Watershed Condition Framework, with an emphasis on:*

1. *Restoring fish habitat connectivity, especially in streams occupied by ES)-listed fishes and in designated critical habitat (DCH).*
2. *Reducing road-related accelerated sediment and other road related impacts*

Measurements:

- The number of crossings removed or replaced to specifically improve fish passage.
- Road density/location by subwatershed.

- Stream miles improved-includes miles of fish habitat re-connected and miles of stream enhanced through road decommissioning and other road treatments.
- Number of road/stream crossings improved.

Wildlife

Objective 4*:* *Improve habitat for ESA-listed northern Idaho ground squirrel (NIDGS) and Family 1 wildlife species, as represented by the white-headed woodpecker, a Region 4 Sensitive Species (USDA Forest Service 2011) and Forest Management Indicator Species (MIS), by restoring forest conditions that contribute to source habitat for these species. Forested stands providing these source habitats should be restored to conditions within the Historical Range of Variability (HRV).*

Measurements:

- Quantity and quality of Family 1 - white-headed woodpecker habitat restored to conditions within HRV. Quantity is measured by acres of PVGs 2, 5, and portions of PVG 6 in the Large Tree Size Class and Low (but not less than 25 percent) Canopy Closure Class. Quality is measured by the old forest and snags, patch size and distribution as described in Appendix E of the WCS.
- Acres treated adjacent to occupied NIDGS sites to expand suitable habitat in the most key areas

Recreation

Objective 5: *Manage recreation use in Boulder Creek and Lost Creek with an emphasis on providing sanitation facilities, identifying and hardening dispersed recreation areas, and developing new trail opportunities.*

Measurements:

- Miles of open motorized trail by vehicle class (per MVUM) for motorized trails, and miles of open and managed non-motorized trails. Miles of open road.
- Change to dispersed recreation sites measured by number of sites provided and recreation facilities provided in the sites.

Economics

Objective 6: *Contribute to the economic vitality of local communities.*

Measurements:

- Employment contribution (number of jobs on annual average)
- Income contribution

PROPOSED ACTION

Proposed landscape restoration treatments activities that would occur under this project include:

- Vegetation treatments on approximately 40,000 acres, including commercial (22,000 acres) and non-commercial (18,000 acres) treatments. Associated actions include road maintenance and temporary road construction.
- Prescribed fire on approximately 45,000 acres.

- Watershed improvements including new long term road closures, road decommissioning, and 40 fish passage barrier improvements.
- Recreation improvements, including new trail developments, rerouting of existing trails, installing trail signs and information kiosks, improving and constructing trailhead parking, decommissioning outhouses and installing vault toilets, improving dispersed camping sites by designating sites and adding fire rings, and graveling campsites and campground access roads.

PUBLIC INVOLVEMENT

This project is based in part on recommendations provided by the Payette Forest Coalition (PFC) to the Forest Supervisor on January 25, 2013. The PFC is a collaborative group formed under the Omnibus Public Land Management Act of 2009 (PL 111-11) and whose recommendations are structured to meet the intent of the Collaborative Forest Landscape Restoration Act (CFLRA). The PFC members represent stakeholders from a broad range of interests, including the environmental community, timber industry, recreational groups, and state and county government. The purpose of the Collaborative Forest Landscape Program is to encourage the collaborative, science-based ecosystem restoration of priority forest landscapes.

Initial scoping for this project occurred on February 22, 2013. Letters requesting comments were sent to approximately 312 local, state, and federal agencies, individuals and organizations. The complete mailing list is in the project record. Legal notices were published in the *Idaho Statesman* (the legal paper of record) on February 27, 2013, the *Adams County Record* on February 27, 2013, and the *McCall Star-News* on March 7, 2013. A Notice of Intent (NOI) was published in the Federal Register on February 25, 2013. In addition the New Meadows Ranger District hosted a public meeting to gather input on the project on March 20, 2013. This Project was first listed on the Payette National Forest's Schedule of Proposed Actions (SOPA) in July, 2012, and scoping letters, project description and other project information were posted on the Payette National Forest public website at http://www.fs.usda.gov/land/payette/landmanagement.

Twenty-two responses were received during scoping. The comments were reviewed and used to aid the Interdisciplinary team in identification of issues and indicators. Comment letters received are part of the project record.

TRIBAL CONSULTATION

Tribal governments have a special and unique legal and political relationship with the United States government as reflected in the United States Constitution, treaties, statutes, court decisions, executive orders, and memoranda. This relationship imparts a duty on all federal agencies to consult, coordinate, and communicate with American Indian Tribes on a government-to-government basis. Because Indian Tribes can be affected by the policies and actions of the Forest Service in managing the lands and resources under its jurisdiction, the Forest Service has a duty to consult with them on matters affecting their interests. Because of this government-to-government relationship, efforts were made to involve local tribal governments and to solicit their input regarding the proposed action.

The Forest Service introduced this project to the Shoshone-Paiute leaders during Wings and Roots Program meeting (government to government consultation) on April 12, 2012. Updates were provided to

the Shoshone-Paiute leaders during Wings and Roots Program meetings on December 13, 2012, February 14, 2013, April 11, 2013, June 14, 2013, and August 14, 2013.

The Forest Service presented the proposed action to the Nez Perce Staff on March 6, 2013. Updates were provided to the Nez Perce Staff on June 5, 2013 and September 4, 2013.

The proposed action was presented to the Shoshone-Bannock Tribe on September 11, 2013.

ISSUES AND INDICATORS

Issues were used to develop alternatives and/or appropriate mitigation measures or project design features to address the effects of proposed activities. Indicators were developed for each issue, and are used to compare the effects of proposed activities by alternative.

Forested Vegetation

Issue 1: *The intensity of the vegetation treatments will affect how well the desired conditions for vegetation and wildlife are achieved.*

Indicators: The following indicators will be evaluated after treatment.

- Tree Size Class
    - Acres treated to promote or maintain the large tree size class.
    - Percentage of area (acres) in each tree size class.
- Canopy Cover
    - Percentage of area (acres) in each canopy cover class within the large tree size class.
- Species Composition
    - Acres treated to maintain and promote desired species composition.
- Spatial Patterns
    - Percent departure from reference conditions per Potential Vegetation Group.

Watershed Resources and Fish Habitat

Issue 2: *Watershed conditions and sediment rates may be altered due to the proposed activities for roads, vegetative treatments, and prescribed fire within the analysis area.*

Indicators by subwatershed:

- Maximum percent over natural sediment yield (Boulder Creek only BOISED Model output)
- Cumulative net difference in sediment yield over 10 years (Boulder Creek only BOISED Model output)
- Total miles of system road decommissioning that achieve long-term soil productivity and hydrologic function (obliteration)
- Total miles of unauthorized route treatments that achieve long-term soil productivity and hydrologic function (obliteration)
- Miles of system road decommissioning that achieve long-term soil productivity and hydrologic function (obliteration)within Riparian Conservation Areas (RCA)s

Issue 3: *The number of roads selected for the Minimum Road System (MRS) and their maintenance level and location could affect sediment rates and long term watershed functionality.*

Indicators:

- Total road miles (system and unauthorized routes) by subwatershed and maintenance level
- Total road density (system and unauthorized routes) by subwatershed
- Long-term annual percent over natural sediment yield (Boulder Creek only BOISED Model output)

Issue 4: *Proposed activities may change timing and duration of peak runoff and increase bank instability in sensitive stream channels.*

Indicators:

- Number of drainages where there is an increase in the Channel Condition Risk
- Number of drainages that are over 25 percent Equivalent Clearcut Area (ECA) (High Category)

Issue 5: *Treatments that propose thinning of vegetation in RCAs may negatively affect sediment delivery, stream temperatures and large woody debris (LWD).*

Indicators:

- Acres of Riparian Conservation Area (RCA) vegetation treatments
- Acres of treatment within one site potential tree height

Soil Productivity

Issue 6: *Proposed activities may decrease long-term soil productivity and impair soil-hydrologic function.*

Indicators:

- Amount of Detrimental Disturbance (DD) within activity areas meets Forest Plan requirement
- Amount of Total Soil Resource Commitment (TSRC) within the project area meets Forest Plan requirement

Wildlife

Issue 7: *Restoration treatments, while a benefit to white-headed woodpeckers, may adversely affect source habitat for other wildlife species, such as pileated woodpecker, northern goshawk, elk, and lynx, which are dependent on denser mixed-conifer forests with multi-layer structural characteristics.*

Indicator:

- Quantity (acres) and quality (old forest and snags, patch and pattern) of habitat for wildlife species that require moderate to dense, mixed-conifer forests (pileated woodpecker (MIS) flammulated owl, elk, and lynx)
- Quantity (acres) and quality of low density ponderosa pine that serve as habitat for Family 1 wildlife species such as the white-headed woodpecker (MIS)

Issue 8: *Road densities affect wildlife (i.e., elk) security and can lead to the removal of important habitat components (snags) for cavity dependent wildlife.*

Indicator:

- Change in security areas (Hillis *et al*. 1991) and miles of National Forest System (NFS) roads and unauthorized roads decommissioned by either physical closure, or by obliteration, and estimated effectiveness of decommissioning and resulting effects to elk and snags and wildlife species of concern.

Issue 9: *Project activities (logging, log haul, prescribed burning, and temporary road construction) may affect other wildlife species of concern, such as northern Idaho ground squirrel (NIDGS) and Canada lynx.*

Indicators:

- Quantity (acres) and quality of existing NIDGS habitat and acres treated to improve forage and population expansion.
- Quantity and quality of existing Canada lynx habitat.

Transportation

Issue 10: *Proposed activities to the road system (i.e. road closures and decommissioning) may reduce the amount of access to the areas identified in the Forest Plan for active management. Road access is needed for economical active management activities, including timber and biomass harvest, thinning, and fuels treatments.*

Indicators:

- Acreage within suited timber base within ¼ mile from an existing system road.
- Acreage within suited timber base within ¼ mile from a drivable existing system road.

Recreation

Issue 11: *Project may change the existing recreational road and trail access in the Lost Creek/Boulder Creek watersheds.*

Indicator:

- Miles of open motorized trail by vehicle class (per Motorized Vehicle Use Map (MVUM)) for motorized trails, and miles of open and managed non-motorized trails. Miles of open road.

Issue 12: *Project activities may change the existing recreational dispersed camping opportunities in the Lost Creek and Boulder Creek subwatersheds.*

Indicator:

- Change to dispersed recreation sites measured by number of sites provided and recreation facilities provided in the sites.

Economics

Issue 13: *Costs associated with restoration activities under the proposed action are anticipated to exceed potential revenue generated over the life of the project. Although the proposed action would improve ecological health and function within the project area, the project may be perceived as economically inefficient from an accounting standpoint.*

Indicators:

- Present value of treatment costs
- Benefits from reduced fire risk
- Non-market benefits of improved ecological conditions

ALTERNATIVES CONSIDERED IN DETAIL

Alternative A–No Action

This is the required no action alternative that provides a baseline against which impacts of the various action alternatives can be measured and compared and represents the existing condition in the Project area. Under Alternative 1, none of the specific management activities proposed in the DEIS would be implemented to accomplish project goals and objectives. Ongoing activities such as recreation, public fuelwood gathering, fire suppression, normal road maintenance, and existing road closures would continue at current levels.

Alternative B – Proposed Action

Alternative B is the proposed action. It responds in part to the purpose and need as stated in Chapter 1 of the DEIS, and incorporates the recommendations of the PFC and recreation access concerns expressed in comment letters and public meetings. Treatments include commercial and non-commercial vegetative treatments, prescribed fire, and associated actions.

Alternative B Vegetation Treatments

Commercial Vegetation Treatments

Commercial thin-free thin (CT-FT) - 12,200 acres. Free thinning would allow flexibility to use different thinning methods for varying stand conditions and objectives. For this project, free thinning would be accomplished primarily by low thinning (removing trees from the lower crown classes) with some crown thinning (removing trees from the dominant and co-dominant crown classes) and occasionally sanitation cutting to improve stand health by reducing the anticipated spread of insects or disease.

These treatments would generally be completed in forested areas dominated by mature, vigorous ponderosa pine, Douglas-fir and / or western larch (*i.e.* – Potential Vegetation Group (PVG) 1, 2, 5 and portions of PVG 6 dominated by early seral species) with canopy closures greater than 35 percent.

Free Thin–Patch Cut (FT-PC) - 1,800 acres. This treatment would be implemented in relatively cool, moist grand fir forest types that have evidence (*i.e.,* - relic early seral trees, stumps, snags, etc.) of previously having an aspen, ponderosa pine, western larch and/or Douglas-fir component. The treatment would occur in stands that still have a component of early seral species (*i.e.,* – 25 to 75 percent of the desired amounts) but not enough to free thin throughout and still leave the desired species composition.

Implementation of this treatment would allow for regeneration (patch cut with reserves) in patches ranging from three to ten acres in size, generally on less than 50 percent of a stand. In regenerated areas (patches) approximately four to twelve trees per acre would be retained as reserve trees. The stand would be either naturally or artificially regenerated after treatment.

Commercial Thin / Mature Plantations (CT-MP) - 8,100 acres. This treatment would be applied to stands that were previously artificially regenerated (plantations). These stands are typically greater than 30 years in age and were planted predominately with ponderosa pine, Douglas-fir, and/or western larch. These mature plantations contain commercial trees with an average diameter at breast height (DBH) greater than eight inches and would average approximately 70 to 80 trees per acre (this would generally result in crown spacing of 10-15 feet) after thinning. Thinning would generally favor the retention of larger, early seral trees and be completed to create stands with variable densities while promoting a mix of desired species. Merchantable material would be removed from the site and utilized as markets allow. Non-commercial material (slash) would be lopped and scattered, mechanically harvested, hand piled, machine piled, and/or broadcast burned to reduce fuel loading. The cost of slash treatment, coarse woody debris, and fuel loading would be considerations in determining the method of non-commercial material treatment.

Commercial Thin within RCA's-Both thinning and prescribed fire treatments are proposed in the Riparian Conservation Areas (RCAs). Thinning and prescribe fire treatments in RCAs are not proposed in the Boulder Creek subwatershed (see Appendix A for further information on treatments in RCAs). Approximately 1,800 acres of CT-FT and CT-MP treatments have been proposed in areas dominated by drier forest types historically maintained by frequent, low intensity fire regimes to maintain upland vegetation within the historic range of variability. These acres are not additional acres of proposed treatment. These 1,800 acres are already accounted for in the CT-FT and CT-MP section, above. Only areas in the outer half of RCAs have been proposed for this treatment and the CT-FT and CT-MP treatment descriptions would be modified in these areas to retain adequate stocking to achieve shade and large woody debris recruitment objectives within RCAs.

Commercial thinning treatments are intended to move upland vegetation within RCAs toward the desired conditions described in the Forest Plan (Forest Plan, pgs. III-30, A-15) while maintaining soil, water, riparian and aquatic resources. Proposed treatments have been designed to mitigate potential activities that could degrade current RCA conditions or retard the attainment of SWRA desired conditions. All RCA treatments would apply only to upland vegetation that occurs within the outer portion of a RCA, and not to riparian vegetation (*i.e.*, – willow, spruce). These actions, based on further site specific analysis, are consistent with direction for upland vegetation desired conditions and RCAs in Forest Plan Appendices A and B (USDA Forest Service 2003).

RCA treatments would remove less than 20 percent canopy cover and would be developed in consultation with the district fish biologist and/or hydrologist to ensure streambank stability and ground cover are considered and riparian functions are maintained.

In portions of RCAs where commercial thinning treatments would not be feasible or deleterious effects to riparian functions and ecological processes (described in the Forest Plan, page B-37) are anticipated, the unit (or portion(s) thereof) would be excluded from treatment.

Generally, ground disturbing activities in RCAs would be avoided. Due to the site-specificity of each proposed RCA treatment unit, a map and description of the layout of the RCA portion of the unit would be provided to the District fisheries biologist and, hydrologist,(or qualified designees) for field

verification. A site-specific plan would be approved by a District hydrologist and fisheries biologist prior to implementation. See management requirements and project design features (DEIS Tables 2-4 and 2-5) for more detailed descriptions of mitigation measures and management requirements.

Non-commercial Vegetation Treatments

Non-Commercial Thinning – 18,000 acres. Non-commercial thinning would be completed in plantations that currently have density-related stress occurring. This constitutes approximately 1,700 acres. In addition, ladder fuel thinning would occur on approximately 16,000 acres. All acres targeted for the application of fire would be evaluated for ladder fuel thinning in order to minimize mortality from prescribed fire and aid in moving towards restored conditions. This ladder fuel thinning may occur within plantations to minimize prescribed fire-related mortality.

Ladder fuel thinning would be permitted within RCAs where active ignition is anticipated. All ladder fuel treatments in RCAs would be completed by hand and would not cut trees larger than eight inches DBH. Slash produced from ladder fuel treatments would be lopped and scattered or hand piled. Piling of slash would not occur within RCAs. See Project Design Features for further description of measures to ensure that activities do not degrade or retard soil, water, riparian, or aquatic desired conditions.

Associated Actions

A number of activities associated with implementing these vegetative treatments are necessary. These include: road maintenance and use, 29 miles of temporary road construction, gravel pits, harvest systems, brush disposal, site preparation, and planting.

Alternative B Prescribed Fire Treatments

Approximately 45,000 acres of the project area would be targeted for prescribed burning over the next 15-20 years (see DEIS/map packet Figure 2-2). In stands where commercial activities are proposed the application of fire would generally occur after commercial activities are complete. Re-introducing 500 to 10,000 acres of fire annually for the next 15-20 years would move forested and non-forested vegetation towards conditions that more closely represent historic distribution, structure, and function, and would move the project area towards desired conditions as described in Appendix A of the Forest Plan.

Alternative B Watershed Improvement and Restoration Treatments

Road Maintenance and Travel Management

System roads identified to remain on the landscape as part of the reduced minimum road system (MRS) would be maintained and improved (see DEIS/map packet Figures 2-3 and 2-4). Activities designed to reduce sediment production in the Boulder Creek subwatershed would be guided by site-specific sediment modeling (Geomorphic Road Analysis and Inventory Package (GRAIP); http://www.fs.fed.us/GRAIP/). All closed Maintenance Level 1 Forest System roads would receive appropriate long-term closure treatments including culvert removal, installation of drainage features, and establishment of vegetation to reduce erosion to make them self-maintaining. All roads identified as not open to the public would receive an effective closure device (such as a gate, berm, or other closure device).

Table S-1. Alternative B Proposed Road Treatments by Subwatershed

Subwatershed	Existing System Road Miles/ Mapped Unauthorized Routes	System Road Decommissioning (miles)	Miles moved to Long Term Closure (currently closed to the public)	Number of Fish Passage Barrier Improvements	Miles of ATV Trail Conversion (currently seasonally open road)	Restoration of Unauthorized Routes (miles)	New Road Miles (Relocation of decommissioned road)	Change to Motorized Access (miles)
Boulder Creek	93/22	30	<2	16	0	12	0.5	- 1.0
Lost Creek	183/73	21	35	11	12*	40	0	+ 3.8
Lower West Fork Weiser	7/<1	<1	0	0	0	0	0	- 0.4
Upper West Fork Weiser	115/32	9	10	7	0	20	0	-0.5
Upper Weiser River	75/40	10	13	6	0	18	1.0	+0.1
Total	473/167	70	60	40	12*	90	1.5	+2.0

*Would also include conversion of approximately two miles of unauthorized routes to ATV trail.

Fish Passage/Habitat Connectivity

Improvements to fish passage, especially in the Boulder Creek subwatershed, are needed to address the purpose and need of the project. Sixteen crossings have been identified as important fish passage barriers in the Boulder Creek subwatershed in streams occupied by ESA-listed fishes or in Designated Critical Habitat (DCH). These crossings have been rated as either a Priority 1 (within a stream occupied by listed fish species or in DCH with abundant suitable upstream habitat) or Priority 2 (within DCH or suitable habitat for TES and desired fish species) for replacement (see DEIS/map packet Figures 2-3 and 2-4).

In the Boulder Creek subwatershed, this project proposes replacement of 11 of these crossings with appropriate structures (the remaining five barriers would be removed with the proposed road decommissioning). Additional stream crossings are present in Boulder Creek but are not proposed for replacement in this project.

Outside of the Boulder Creek subwatershed, an additional 24 road-stream crossings have been identified in the Lost Creek, Upper West Fork Weiser River and Upper Weiser River subwatersheds on larger streams and major tributaries as a Priority 2 for potential replacement to improve fish passage. Although additional barriers are present in all subwatersheds on unnamed and intermittent stream channels, this project will focus on mainstem fish-bearing streams and tributaries. None of the subwatersheds outside of Boulder Creek are recognized as Aquatic Conservation Strategy (ACS) watersheds or contain ESA-listed fishes. Crossings should be replaced as road work and project activities occur in these areas to improve habitat conditions for desired native fish species, and improve hydrologic connectivity in those subwatersheds.

Alternative B Recreation Improvements

Boulder Creek

Trail maintenance and trail relocation to improve watershed conditions by repairing erosion problems along the trails (due to lack of trail maintenance and poorly located portions of some trails) are the focus of recreational improvements proposed in Boulder Creek (see DEIS/map packet Figure 2-5). Additionally, old pit outhouses would be removed and the sites would be restored.

The Lost Creek-Boulder Creek Landscape Restoration Project would:

1. Perform heavy maintenance on all existing Forest Service system trails within the Boulder Creek subwatershed to improve them to Forest Service Trail standards, including closing one trailhead and improving one trailhead.

2. Decommission the Ant Basin #324 trail head, 0.9 miles of Trail #324 (non-motorized trail) that accesses the #178 trail, close and decommission a short segment of Forest Road 50079 that access the trailhead and would no longer be needed. Relocate all trail use to the larger, better located Ant Basin South #519 trail; improve FS Road 51254 (which accesses the Ant Basin South Trailhead and #519 motorized trail); construct trailhead parking at the Ant Basin South trailhead, which would accommodate up to four horse trailers/trucks and an additional two passenger vehicles at one time; provide a turn-around for trucks with trailers and install a single vault restroom, and two metal hitch rails for stock.

3. Decommission and remove five wooden pit outhouses located along FS Road 50074 road in the Boulder Creek subwatershed and rehabilitate the sites. These outhouses are no longer useable.

Lost Creek

Specific to recreation in Lost Creek Subwatershed, the Forest Service proposes to:

1. Install three, 3-panel entrance/information kiosks at the primary entry points to the reservoir. The middle panel on each kiosk will have a large scale map of the reservoir area that displays where dispersed camping using a vehicle is allowed, new OHV trail opportunities, vault restroom locations, developed camping opportunities (Cold Springs Campground), and the areas where the Forest Service is promoting personal self-contained toilets for camping use.

2. Install six single vault toilets around the reservoir in the most popular dispersed camping areas; promote the use of self-contained portable toilet units, (similar to what river users carry) in dispersed camping areas outside the immediate reservoir area; remove and decommission one remaining wooden unusable pit toilet located adjacent to the dam.

3. Identify and sign one main access road into the larger dispersed sites located along the west side of the reservoir, improving the entrance roads where needed to bring them up to road standards for level 2 roads; close and rehabilitate the multiple access routes into these dispersed camping sites.

4. Designate 68 (with signing, barrier rock and some pole fencing) desired dispersed campsites to retain; harden (gravel) and install barrier rock and fencing to define the boundaries of the larger sites to avoid perpetual and continued growth of the camping sites/areas; sign the access into these sites from main roads and sign individual dispersed campsites; add fire rings to some of the larger identified dispersed camping sites. Dispersed camping using a motorized vehicle will be restricted to designated sites only on Forest Road 089 road surrounding the Lost Valley Reservoir.

5. Complete closure and restoration of 12 undesired camping sites too close to the reservoir and/or those with poor access or near riparian areas.

6. Perform road to OHV trail conversion on 13 miles of closed roads and open seasonal roads. Identify an additional 7 miles of road to OHV trail conversion between draft and final EIS. The

proposed 13 miles are located directly south of Lost Valley Reservoir. The OHV trails would be open to vehicles 72 inches – 84 inches in width and designed to meet Trail Class 2 standards for Four-wheel drive vehicles greater than 50 inches in width, as defined in FSH 2309.18 – Trails Management Handbook, Chapter 20. These standards have a design tread width of 72 inches – 84 inches, are on native material with limited grading, with structures minimum width being 96 inches.

Public Access

Under Alternative B, approximately 255 miles of open road would be available within the entire project area for public access for recreation opportunities including, but not limited to hunting access, fire wood gathering, berry picking, scenic driving, and dispersed camping in designated sites along the open roads.

Alternative C

This alternative proposes less intensive vegetative treatments and fewer acres of vegetative treatments than Alternative B. Approximately 14,500 acres of commercial treatments and approximately 22,000 acres of non-commercial treatments are proposed in Alternative C (see DEIS/map packet Figure 2-7). It has been designed to address concerns regarding soil, water, riparian and aquatic resources as well as wildlife concerns.

The primary differences between this alternative and Alternative B are that no regeneration treatments (patch cuts or shelterwood) would occur and no thinning in RCAs would occur. In addition, fewer acres of treatment within grand fir forest types are proposed and these treatments would generally be less intensive (i.e. remove less trees in treated areas) than those proposed in Alternative B.

Alternative C Vegetation Treatments

Commercial Vegetation Treatments

Commercial thin-free thin (CT-FT) – 8,500 acres. Treatments in drier ponderosa pine and Douglas-fir forest types (PVGs 1 and 2) would be identical to those proposed in Alternative B. The purpose of CT-FT treatments would be identical to those in Alternative B.

In the cooler and moister grand fir forest types (PVGs 5 and 6), only the more dense stands (typically with higher existing canopy cover) would be proposed for treatment and only when there is an existing component of the desired species composition.

These treatments would be similar to CT-FT treatments described in Alternative B. The major differences are that this Alternative would:

- Limit the amount of sanitation cutting to improve stand health by reducing the anticipated spread of insects or disease. Sanitation treatments would not occur in mature stands unless they were in or adjacent to stands of young trees that would be adversely affected by forgoing sanitation treatments.
- These treatments would generally be completed in forested areas dominated by mature, vigorous ponderosa pine, Douglas-fir and / or western larch (*i.e.* - PVG 1, 2, 5 and portions of PVG 6 dominated by early seral species)
- In PVG 5 and 6, these treatments are proposed only in dense stands, typically with greater than 70 percent canopy cover.

Commercial Thin / Mature Plantations (CT-MP) – 6,000 acres. These treatments would be identical to Alternative B except that 10-20 percent of each stand would be untreated to provide addition elk security and thermal cover.

Commercial Thin within RCAs-No commercial thinning treatments (CT-FT or CT-MP) within RCAs have been proposed in this alternative.

Non-commercial Vegetation Treatments

Non-Commercial Thinning – 22,000 acres. As in Alternative B, approximately 1,600 acres of non-commercial thinning in plantations is proposed. Approximately 4,000 more acres of ladder fuel thinning have been proposed in Alternative C than in Alternative B.

Associated Actions

Actions associated with this alternative also include road maintenance and haul, temporary roads, harvest systems, and brush disposal. No site preparation or reforestation activities are planned as a part of this alternative. Other differences include:

- Fewer miles of system roads would be utilized for commercial product haul,
- 11 miles of planned temporary roads (six miles of which are on existing roadbeds) would be utilized.

Alternative C Prescribed Fire Treatments

Prescribed fire treatments under Alternative C would be identical to the proposed action (see DEIS/map packet Figure 2-2).

Alternative C Watershed Improvement and Restoration Treatments

Alternative C addresses comments that requested a more effective watershed restoration effort (especially in Boulder Creek) and is designed move the Boulder Creek subwatershed toward WCF Condition Class 1 and Forest Plan WCI category FA (Functioning Appropriately) for road density. This alternative emphasizes watershed restoration treatments in all subwatersheds throughout the project area.

Road Maintenance and Travel Management

System roads identified to remain on the landscape as part of the reduced MRS would be maintained and improved as described in the proposed action. Activities designed to reduce sediment production in the Boulder Creek subwatershed would be guided by site-specific (GRAIP) sediment modeling. All closed maintenance level 1 roads would receive appropriate long-term closure treatments including culvert removal, installation of drainage features, and establishment of vegetation to reduce erosion. All roads identified as closed to the public would receive an effective closure, such as gates or berms, or by obliteration of a short section or road and placement of rock or large woody debris.

Table S-2. Alternative C Proposed Road Treatments by Subwatershed

Subwatershed	Existing System Road Miles/ Mapped Unauthorized Routes	System Road Decommissioning (miles)	Miles moved to Long Term Closure (currently closed to the public)	Number of Fish Passage Barrier Improvements	Miles of ATV Trail Conversion (currently seasonally open road)	Restoration of Unauthorized Routes (miles)	New Road Miles (Relocation of decommissioned road)	Change to Motorized Access (miles)
Boulder Creek	93/22	60	2	16	0	15	Relocation 0 Re-route 0.6	-9.9
Lost Creek	183/73	26	35	11	12	51	Relocation 0 Re-route 0.1	-3.0
Lower West Fork Weiser	7/<1	3	0	0	0	1	Relocation 0 Re-route 2.0	-2.6
Upper West Fork Weiser	115/32	24	10	7	0	22	Relocation 0 Re-route 2.1	-11.4
Upper Weiser River	75/40	19	13	6	0	28	Relocation 0 Re-route 0	-2.6
Total	473/167	132	60	40	12	117	Relocation 0 Re-route 5.0	-29.8

Fish Passage/Habitat Connectivity

Within the Boulder Creek subwatershed, the 16 crossings identified as important fish passage barriers in streams occupied by ESA listed fishes or in DCH and their priority rating (Priority 1 or Priority 2), would remain the same as in the proposed action. Twelve of those crossings would be addressed by removal as part of proposed road decommissioning. The four remaining crossings (which are located on steelhead DCH) would be replaced with appropriate crossing structures.

In addition to the aforementioned 16 crossings in the Boulder Creek subwatershed, an additional seven (mapped) perennial stream crossings would be removed during decommissioning on the northern portion of the Chokecherry Flat Road (FS50158) which would provide additional improvements in fish habitat connectivity in streams including: Pollock Creek, Cold Springs Creek, Bull Horn Creek, Star Creek and the North Fork of Star Creek. Additional stream crossing removals would also occur on unnamed and unmapped streams, but the exact number is not known.

Outside of the Boulder Creek watershed, actions regarding fish passage improvements would be identical to those described in the proposed action. Additional stream crossings would be removed through road decommissioning (when compared to the proposed action) but improvements to fish passage from those crossing removals is expected to be incremental.

Alternative C Recreation Improvements

The recreation portion of Alternative C would be the same as Alternative B with the following exceptions (see DEIS/map packet Figure 2-11):

The proposed OHV trail miles in the Lost Creek area are reduced to 11miles, with reductions made to eliminate steep sections of routes not suitable for a sustainable trail. No additional routes would be identified between draft and final, so OHV trails would remain at 11 miles. OHV trails would be limited to “vehicles 50 inches and less in width (more typical of current ATV trails). Trails would be designed to meet Trail Class 2 standards for All-terrain vehicles as defined in FSH 2309.18 – Trails Management Handbook. These trails have a standard width of 48 – 60 inches, are on native material with limited grading, with structures minimum width being 60 inches.

In the Lost Creek area, approximately 20 miles of non-motorized, Trail Class 1 (minimally developed) (FSH 2353.142, Exhibit 01) with a managed and designed use for Pack and Saddle Stock use would be added to the trail system. These new trails would be also open to other non-motorized uses, including hiking and mountain biking. The added trails are primarily located on existing road prism. Approximately 3 miles of trail would need to be constructed to connect these proposed loops.

Lick Creek Trail #358, which accesses the Lick Creek Lookout, would receive heavy trail maintenance.

Dispersed camping using a motorized vehicle would be restricted to designated sites only on open roads throughout the project area. Approximately 200 sites could be designated (including the 68 sites proposed for designation surrounding the Lost Valley Reservoir road system.

Public Access

Open roads available for public access are reduced 41 miles from the existing condition to 224 miles of open road. These roads would offer access and recreation opportunities including, but not limited to hunting access, fire wood gathering, berry picking, scenic driving, and dispersed camping in designated sites along the open roads.

Alternative D

This alternative proposes the greatest amount and the most intensive vegetative treatments of all the alternatives. Approximately 25,000 acres of commercial treatments and approximately 18,000 acres of non-commercial treatments are proposed in Alternative D (see DEIS/map packet Figure 2-12). It has been designed to address concerns regarding the level of vegetative restoration and duration of benefits.

The primary differences between Alternative D and the proposed action are additional vegetative treatments have been proposed and the regeneration treatments are more intensive.

Alternative D Vegetation Treatments

Commercial Vegetation Treatments

Commercial thin-free thin (CT-FT) – 14,500 acres. The purpose and description of these treatments would be similar to Alternative B with the exception of the following specifications:

- Where aspen are present, conifers could be removed within the aspen stand to improve the integrity of these stands. Openings of less than 10 acres may be utilized to stimulate aspen regeneration.

- In PVGs 1 and 2, the average canopy cover in these stands after harvest and underburn operations would be between 20 and 30 percent (10 to 25 foot crown spacing). In PVGs 5 and 6, average post treatment canopy cover would be between 30 and 35 percent (10 to 15 foot crown spacing).

Shelterwood with Reserves – 2,600 acres. This alternative would utilize the shelterwood with reserves method to regenerate stands that do not have enough ponderosa pine, western larch and/or Douglas-fir to free thin throughout and retain these species in desired quantities.

These treatments would retain small clumps and patches of untreated areas throughout each stand to meet wildlife and visual quality objectives. The specifications for this treatment are:

- In regenerated portions of the stand retain a minimum of 8-12 trees per acre (approximately 10-12 percent canopy cover), preferably seral species in the dominant and codominant crown classes. If seral species are not available, dominant nonseral and vigorous serals in any crown class would be the second preference for reserve trees;

- Retain 5 to 10 percent of the stand area in untreated patches ranging from 1/10th to two acres in size. These patches should be located where there are clumps of seral species and/or around existing snags (preferably seral snag greater than 20 inches in diameter), when available;

- If portions of the stand could be treated with CT-FT treatment and retain a basal area of greater than 40 feet^2 of seral species, treat those areas with CT-FT treatment described above.

Commercial Thin / Mature Plantations (CT-MP) - 8,100 acres. These treatments would be identical to Alternative B.

Commercial Thin within RCAs-Commercial treatments within RCAs would be identical to Alternative B except an additional 200 acres of RCAs have been proposed for treatment bringing the total to 2,000 acres of CT-FT and CT-MP treatments in RCAs.

Non-commercial Vegetation Treatments

Non-Commercial Thinning – 18,000 acres. Same as Alternative B.

Associated Actions

Actions associated with this alternative (road maintenance, temporary roads, harvest systems, and brush disposal) are identical to Alternative B except that additional site preparation and reforestation would be completed and 31 miles of temporary roads are proposed. Incidental temporary roads would be identical to Alternative B.

Alternative D Prescribed Fire Treatments

Prescribed fire actions under Alternative D would be the same as under Alternative B, the proposed action (see DEIS/map packet Figure 2-2). Additional acres of prescribed fire may be completed in areas thinned but not targeted for burning for brush disposal and site preparation objectives under this alternative.

Alternative D Watershed Improvement and Restoration Treatments

All project activities designed for watershed improvement (road treatments and fish passage improvements) would remain as described in the proposed action (Alternative B), with the exception that under Alternative D 12 miles of road would be changed to long-term closure (see DEIS/map packet Figures 2-13 and 2-14).

Alternative D Recreation Improvements

Recreation improvements under Alternative D would be the same as under Alternative B, the proposed action (see DEIS/map packet Figures 2-5 and 2-6).

Alternative E

Alternative E responds to comments that question the implementation costs of the project compared to projected economic and restoration benefits. It drops some of the more expensive treatments, while attempting to retain restoration goals of the proposed action.

Similar treatments to Alternative D are proposed in Alternative E, although less acres of treatment have been proposed. Approximately 20,500 acres if commercial treatments and approximately 12,000 acres of non-commercial treatments are proposed in Alternative E (see DEIS/map packet Figure 2-15). Treatments are spatially arranged to create continuous blocks of wildlife habitat.

Alternative E Vegetation Treatments

Commercial Vegetation Treatments

Fewer commercial acres have been proposed because treatments have been designed to retain areas with elk security, to clump treatments and to minimize restoration treatments in mature plantations that are isolated from other commercial treatments.

Commercial thin-free thin (CT-FT) – 13,200 acres. The purpose and description of these treatments would be identical to Alternative D, except that fewer acres are proposed.

Shelterwood with Reserves – 1,900 acres. This treatment would be identical to the Shelterwood with Reserves treatment in Alternative D. Slightly fewer acres have been proposed to focus regeneration treatments adjacent to high priority CT-FT treatments.

Commercial Thin / Mature Plantations (CT-MP) – 5,400 acres. This alternative would treat fewer acres of mature plantations than any of the other alternatives in an attempt to minimize cost while prioritizing mature plantations that would best benefit from this treatment.

Commercial Thin within RCAs-Commercial treatments within RCAs would be identical to Alternative B except 200 acres less of RCAs have been proposed for treatment, bringing the total to 1,600 acres of CT-FT and CT-MP treatments in RCAs. Again, these treatments are not in addition to the CT-FT and CT-MP acres proposed above but are included in the totals for those treatments.

Non-commercial Vegetation Treatments

Non-Commercial Thinning –12,000 acres. Under Alternative E approximately 900 acres of plantation-specific thinning and 11,100 acres of ladder fuel thinning would occur. This is 30 percent less ladder fuel thinning than under Alternative B, the least amount of non-commercial thinning of all action alternatives.

Associated Actions

Associated actions in this alternative would be identical to Alternative D except that only 15 miles of temporary roads are proposed; and brush disposal would emphasize machine piling and burning, whole tree yarding and landing pile burning. Biomass removal would still be utilized but would only occur when necessary to meet other resource objectives (*i.e.* – visual quality, wildlife, SWRA).

Alternative E Prescribed Fire Treatments

Prescribed fire treatments under Alternative E would be identical to the proposed action with the following exceptions (see DEIS/map packet Figure 2-16):

- Total acres of total prescribed fire would be decreased by 30 percent (31,500 acres)

- Acres of prescribed fire applied annually would be decreased by 30 percent (500-7,000 acres)
- No prescribed fire treatments would be applied within the Boulder Creek Watershed

Alternative E Watershed Improvement and Restoration Treatments

Road Maintenance and Travel Management

Roads identified to remain on the landscape as part of the MRS would be maintained and improved as described in the proposed action. Activities designed to reduce sediment production in the Boulder Creek subwatershed would be guided by site-specific (GRAIP) sediment modeling. Closed maintenance level 2 roads identified to become maintenance level 1 roads would receive long-term closure treatments including culvert removal, drainage features, and establishment of vegetation to reduce erosion. All roads identified as closed to the public would receive effective closure.

TableS-3. Alternative E Proposed Road Treatments by Subwatershed

Subwatershed	Existing System Road Miles/ Mapped Unauthorized Routes	System Road Decommissioning (miles)	Miles moved to Long Term Closure (currently closed to the public)	Number of Fish Passage Barrier Improvements	Miles of ATV Trail Conversion (currently seasonally open road)	Restoration of Unauthorized Routes (miles)	New Road Miles (Relocation of decommissioned road)	Change to Motorized Access (miles)
Boulder Creek	93/22	29	2	16	0	12	Relocation 0 Re-route 0.6	-1.0
Lost Creek	183/73	13	35	0	12	40	Relocation 0 Re-route 0	-1.4
Lower West Fork Weiser	7/<1	0	0	0	0	0	Relocation 0 Re-route 0	-.04
Upper West Fork Weiser	115/32	6	10	0	0	20	Relocation 0 Re-route 0	-.06
Upper Weiser River	75/40	3	13	0	0	18	Relocation 0 Re-route 0	-.05
Total	473/167	51	60	16	12	90	Relocation 0 Re-route 0.6	-3.9

Fish Passage/Habitat Connectivity

The 16 crossings identified in the Boulder Creek subwatershed would be improved (removed or replaced) as described in the proposed action. The 24 fish passage improvements in the Weiser River subbasin identified in the proposed action would not be addressed with this project.

Alternative E Recreation Improvements

Recreation improvements under Alternative E would be the same as under Alternative B, the proposed action (see DEIS/map packet Figures 2-5 and 2-6).

COMPARISON OF ALTERNATIVES

Table S-4 compares restoration activities by alternative. Tables S-5 through S-16 compare alternatives by each resource objective. Tables S-17 through S-29 compare alternatives by issue.

Table S-4. Comparison of Alternatives by Activity

Proposed Actions	Unit	Alt A	Alt B	Alt C	Alt D	Alt E
Vegetation Treatments and Associated Actions						
Commercial Thin-Free Thin	Acres	0	12,200	8,500	14,500	13,200
Free Thin-Patch Cut	Acres	0	1,800	0	0	0
Commercial Thin-Mature Plantation	Acres	0	8,100	6,000	8,100	5,400
Shelterwood with Reserves	Acres	0	0	0	2,600	1,800
Commercial Treatments in Riparian Conservation Areas[1]	Acres	0	1,800	0	2,000	1,600
Non-commercial thinning	Acres	0	18,000	22,000	18,000	12,000
Temporary road construction	Miles	0	30	11	31	15
Prescribed fire						
Prescribed burning	Acres	0	45,000	45,000	45,000	31,500
Watershed, Fisheries and Wildlife Improvements						
Total fish passage barrier improvements	Number	0	40	40	40	16
System road decommissioning	Miles	0	70	132	70	51
Unauthorized route treatments	Miles	0	90	117	90	90
New long-term closures	Number	0	60	1	12	12
Conversion of seasonally open road to ATV trail	Miles	0	12	12	12	12
Road relocations	Miles	0	1.5	5.0	1.5	0.6
Recreation Improvements						
2-wheel motorized trail	Miles	18	18	18	18	18
Non-motorized trail	Miles	18	18	38	18	18
OHV trail	Miles	0	20	11	20	20

[1] Riparian Conservation Area treatment acres are not additional acres. These acres are included in commercial thin/non-commercial thin acres.

Proposed Actions	Unit	Alt A	Alt B	Alt C	Alt D	Alt E
Open road in project area	Miles	265	255	224	255	255
Designate dispersed campsites	Number	0	68	68	68	68
Install information kiosks	Number	0	3	3	3	3
Decommission outhouses	Number	0	6	6	6	6
Install new vault toilets	Number	0	7	7	7	7

Comparison of Project Objectives by Alternative

Objective 1: Forested Vegetation

Table S-5. Comparison of Alternatives for Objective 1: Forested Vegetation.

Measurements	Alt A	Alt B	Alt C	Alt D	Alt E
Tree Size Class (TSC) • Acres treated to promote or maintain the large tree size class. • Percentage of area (acres) in each tree size class.	Slowest movement toward desired conditions. Leaves least resilient/resistant conditions.	• 15,200 • No immediate post-treatment effects to TSC. Moderate duration of benefits to individual tree growth due to treatment intensity.	• 10,100 • No immediate post-treatment effects to TSC. Least duration of benefits to individual tree growth due to less treatment intensity.	• 16,400 • No immediate post-treatment effects to TSC. Proposes most intensive intermediate treatments which would result in quicker development into large TSC.	• 14,300 • Same as Alt D, except reduced prescribed fire and non-commercial thinning would result in less resilient/resistant landscape conditions than all other action alternatives.
Canopy Cover • Percentage of area (acres) in each canopy cover class (CCC) within the large tree size class.	Moves further from desired conditions. Leaves least resilient/resistant conditions.	**PVG 2:** Moves considerably toward desired conditions. **PVG 5:** Closer in the short term than any of the other alternatives. **PVG 6:** Initially a slight overabundance of low CCC. Over time (i.e. 15-20 years), moves closer to desired low/moderate conditions.	**PVG 2:** Similar to Alt B. **PVG 5:** Less movement toward desired CCCs than all other Alts. **PVG 6:** Very little movement toward desired conditions. **Overall:** Least intensive, retains CCC at relatively high levels.	**PVG 2:** Similar to Alt B. **PVG 5:** Moves closer in the short term than any other alternatives. More abundance in the low CCC. **PVG 6:** Initial overabundance of low CCC. Over time (i.e. 15-25 years), moves closer to desired levels. **Overall:** Most intensive, retains lowest CCC levels of all alternatives.	Effects similar to Alternative D, slightly less acres considered for treatment.
Species Composition • Acres treated to maintain and promote desired species composition.	0	43,200 acres - Proposed treatment intensity is between those in Alternative C (least intensive) and Alternatives D and E (most intensive).	38,300 acres- Proposes least intensive treatments of all alternatives that would have minimal benefits for future species compositions.	44,200 acres- Proposes most intensive treatments that would have greatest benefit on future species composition.	32,500 acres- Proposes most intensive treatments that would have greatest benefit on future species composition.

Measurements	Alt A	Alt B	Alt C	Alt D	Alt E
Spatial Patterns • Percent departure from reference conditions per Potential Vegetation Group. *Immediate post treatment vegetation departure is in bold, 25-year post vegetation departure in italics.*	**PVG 2: 68** *(69)* **PVG 5: 47** (*55)* **PVG 6: 51** *(75)* **Weighted Ave.: 55** *(69)*	**PVG 2: 61** *(40)* **PVG 5: 42** *(32)* **PVG 6: 53** (*57)* **Weighted Ave.: 52** *(46)*	**PVG 2: 61** *(47)* **PVG 5: 41** *(36)* **PVG 6: 52** (*56)* **Weighted Ave.: 52** *(49)*	**PVG 2: 60** *(40)* **PVG 5: 46** *(32)* **PVG 6: 58** *(37)* **Weighted Ave.: 56** *(37)*	**PVG 2: 61** (*43)* **PVG 5: 46** (*32)* **PVG 6: 56** (44) **Weighted Ave.: 55** (*41)*

Objective 2: Fire and Fuels

Table S-6. Acres of Significant Movement toward Historic Fire Regimes by Alternative

Historic Fire Regime	Vegetated Project Area Acres	Percent of Each Fire Regime Significantly Improved by Alternative			
		Alt. B	Alt. C	Alt. D	Alt. E
Non-Lethal	41,867	*66%*	*67%*	*68%*	*44%*
Mixed-Severity I	26,238	*32%*	*23%*	*32%*	*14%*
Mixed-Severity II	7,342	*<1%*	*<1%*	*<1%*	*<1%*
Stand Replacement	1,668	*<1%*	*<1%*	*<1%*	*<1%*
TOTAL / Percent of project area significantly improved	77,155	**37,600**	**38,000**	**38,700**	**30,400**
		49%	*49%*	*50%*	*39%*
Note: It has been assumed that stand treatments consisting of both, thinning and burning would have the greatest impact in restoring fire regimes. Therefore, these acres would likely result in significant improvements. Additionally, grasslands proposed for burning are included in these acres of significant improvement.					

Table S-7. Acres of Improved Historic Fire Regimes by Alternative

Treatment	Alt. B	Alt. C	Alt. D	Alt. E
Thin and Burn (Stands)	31,800	32,200	32,900	24,900
Thin Only (Stands)	8,300	4,300	10,300	7,600
Burn Only (Stands)	7,400	7,000	6,300	1,100
Burn Only (Grasslands)	5,800	5,800	5,800	5,500
Total	**53,300**	**49,300**	**55,300**	**37,000**

Objective 3: Soil, Water, Aquatic, and Riparian Resources

Table S-8. Number of proposed crossing improvements and miles of connectivity restored in each project area subwatershed.

Subwatershed	Alt A		Alt B		Alt C		Alt D		Alt E	
	Number	Miles Improved	Number	Miles Improved	Number	Miles Improved	Number	Miles Improved	Number	Miles Improved
Boulder Creek	0	0	16	15.3	16	25.4 [1]	16	15.3	16	15.3
Upper Weiser River	0	0	6	10.7	6	10.7	6	10.7	0	0
Lost Creek	0	0	11	23.6	11	23.6	11	23.6	0	0
Upper West Fork Weiser River	0	0	7	7.7	7	7.7 [2]	7	7.7	0	0
Lower West Fork Weiser River	0	0	0	0	0	0 [2]	0	0	0	0
Totals	**0**	**0**	**40**	**57.3**	**40**	**67.0**	**40**	**57.3**	**16**	**15.3**

[1] Additional miles improved is a result of decommissioning a portion of FS Road 50158.

Table S-9. Road Density/Location by subwatershed.

	Alt A		Alt B		Alt C		Alt D		Alt E	
Subwatershed	**Total Road Density**	**RCA Road Density**	**Total Road Density**	**RCA Road Density**	**Total Road Density**	**RCA Road Density**	**Total Road Density**	**RCA Road Density**	**Total Road Density**	**RCA Road Density**
Boulder Creek	3.1	2.8	2.0	1.9	1.1	1.2	2.0	1.9	2.0	1.9
Upper Weiser River	4.7	9.8	3.6	6.9	2.8	5.9	3.6	7.0	3.8	8.5
Lost Creek	6.9	6.6	5.3	5.8	4.8	5.7	5.3	5.8	5.5	6.0
Upper West Fork Weiser River	8.5	7.3	6.8	6.6	5.8	5.4	6.8	6.6	7.0	7.0
Lower West Fork Weiser River	1.0	2.1	1.0	2.3	0.5	1.9	1.0	2.3	1.1	2.5

Objective 4: Wildlife Resource

Table S-10 Change in white-headed woodpecker habitat by Alternative and Potential Vegetation Group (acres) for large tree and low canopy, immediately post-harvest (short-term).

	Alt A	Alt B	Alt C	Alt D	Alt E
PVG 1	342	443	402	448	407
PVG 2	304	2,575	1,917	2,558	2,318
PVG 3	---	---	---	---	---
PVG 5	893	5,012	3,802	5,057	4,895
PVG 6	196	4,265	680	6,029	4,849
Totals	1,735	12,296	6,801	14,193	12,469

Table S-11. Change in white-headed woodpecker habitat by Alternative and Potential Vegetation Group (acres) for medium tree and low canopy that will become habitat 5-30 years post treatment (long-term).

	Alt B	Alt C	Alt D	Alt E
PVG 1	1,152	1,152	1,152	1,089
PVG 2	6,869	6,197	6,999	6,561
PVG 3	---	---	---	---
PVG 5	4,322	3,915	4,323	4,295
PVG 6	3,752	2,826	3,769	3,375
Totals	16,095	14,090	16,243	15,320

Table S-12. NIDGS Priority #1 Habitat Treatments (Acres).

	Alt B	Alt C	Alt D	Alt E
No Treatment	621	599	622	1,370
Free Thin	483	338	493	463
Free Thin - Biomass	423	344	423	289
Pre-commercial thin	158	137	158	83
Rx Fire Only	4,077	4,304	4,067	3,558

Table S-13. NIDGS Priority #2 Habitat Treatments (Acres).

	Alt B	Alt C	Alt D	Alt E
No vegetation Treatment	2,498	2,739	2,412	3,765
Free Thin	2,076	1,184	2,378	2,221
Free Thin - Biomass	1,200	864	1,200	802
Pre-commercial thin	128	95	128	80
Rx Fire Only	5,420	6,440	5,164	4,428
Shelterwood	0	0	39	26
Total	11,322	11,322	11,321	11,322

Objective 5: Recreation Resource

Table S-14. Comparison of recreation objective and measurements by alternative.

	Alt A	Alt B	Alt C	Alt D	Alt E
Miles of 2-wheel motorized trail	18	18	18	18	18
Miles of non-motorized trail	18	18	38	18	18
Miles of open road in project area	265	255	224	255	255
Number of designated dispersed campsites	0	68	68	68	68
Number of information kiosks installed	0	3	3	3	3
Number of outhouses decommissioned	0	6	6	6	6
Number of new vault toilets installed	0	7	7	7	7

Objective 6: Economics Resource

Table S-15. Annual Employment by Activity Type under the Alternatives.

Proposed Activities	Alt B	Alt C	Alt D	Alt E
Commercial Forest Products				
Logging and Processing	26	13	38	35
Associated activities*	3	2	3	3
Recreation	< 1	< 1	< 1	< 1
Restoration	29	26	31	23
Road Work	5	4	5	3
Total Employment Contribution	63	46	77	64

*Thin, remove of machine pile, biomass removal, regeneration planting

Table S-16. Annual Labor Income by Activity Type under the Alternatives (thousands of dollars).

Proposed Activities	Alt B	Alt C	Alt D	Alt E
Commercial Forest Products				
Logging and Processing	$ 919	$ 477	$ 1,359	$ 1,239
Associated activities*	$ 62	$ 33	$ 63	$ 59
Recreation	$ 14	$ 15	$ 14	$ 14
Restoration	$ 748	$ 675	$ 794	$ 593
Road Work	$ 121	$ 101	$ 121	$ 83
Total Labor Income Contribution	$ 1,865	$ 1,301	$ 2,351	$ 1,989

*Thin, remove of machine pile, biomass removal, regeneration planting

Comparison of Issues by Alternative

Issue #1: Forest Vegetation

Table S-17. Comparison of Alternatives for Issue #1: Forest Vegetation.

Forest Vegetation Issue: ***The intensity of the vegetation treatments will affect how well the desired conditions for vegetation and wildlife are achieved.***					
Indicators	**Alt A**	**Alt B**	**Alt C**	**Alt D**	**Alt E**
Tree Size Class (TSC) • Acres treated to promote or maintain the large tree size class. • Percentage of area (acres) in each tree size class.	Slowest movement toward desired conditions. Leaves least resilient/resistant conditions.	• 15,200 • No immediate post-treatment effects to TSC. Moderate duration of benefits to individual tree growth due to treatment intensity.	• 10,100 • No immediate post-treatment effects to TSC. Least duration of benefits to individual tree growth due to less treatment intensity.	• 16,400 • No immediate post-treatment effects to TSC. Proposes most intensive intermediate treatments which would result in quicker development into large TSC.	• 14,300 • Same as Alt D, except reduced prescribed fire and non-commercial thinning would result in less resilient/resistant landscape conditions than all other action alternatives.
Canopy Cover • Percentage of area (acres) in each canopy cover class (CCC) within the large tree size class.	Moves further from desired conditions. Leaves least resilient/resistant conditions.	**PVG 2:** Moves considerably toward desired conditions. **PVG 5:** Closer in the short term than any of the other alternatives. **PVG 6:** Initially a slight overabundance of low CCC. Over time (i.e. 15-20 years), moves closer to desired low/moderate conditions.	**PVG 2:** Similar to Alt B. **PVG 5:** Less movement toward desired CCCs than all other Alts. **PVG 6:** Very little movement toward desired conditions. **Overall:** Least intensive, retains CCC at relatively high levels.	**PVG 2:** Similar to Alt B. **PVG 5:** Moves closer in the short term than any other alternatives. More abundance in the low CCC. **PVG 6:** Initial overabundance of low CCC. Over time (i.e. 15-25 years), moves closer to desired levels. **Overall:** Most intensive, retains lowest CCC levels of all alternatives.	Effects similar to Alternative D, slightly less acres considered for treatment.
Species Composition • Acres treated to maintain and promote desired species composition.	0	43,200 acres - Proposed treatment intensity is between those in Alternative C (least intensive) and Alternatives D and E (most intensive).	38,300 acres- Proposes least intensive treatments of all alternatives that would have minimal benefits for future species compositions.	44,200 acres- Proposes most intensive treatments that would have greatest benefit on future species composition.	32,500 acres- Proposes most intensive treatments that would have greatest benefit on future species composition.

Forest Vegetation Issue: ***The intensity of the vegetation treatments will affect how well the desired conditions for vegetation and wildlife are achieved.***					
Indicators	**Alt A**	**Alt B**	**Alt C**	**Alt D**	**Alt E**
Spatial Patterns • Percent departure from reference conditions per Potential Vegetation Group.	**PVG 2: 68** (*69*) **PVG 5: 47** (*55)* **PVG 6: 51** (*75*) **Weighted Ave.: 55** (*69*)	**PVG 2: 61** (*40)* **PVG 5: 42** (*32)* **PVG 6: 53** (*57)* **Weighted Ave.: 52** *(46*)	**PVG 2: 61** (*47*) **PVG 5: 41** (*36)* **PVG 6: 52** (56) **Weighted Ave.: 52** (*49*)	**PVG 2: 60** (*40*) **PVG 5: 46** *(32)* **PVG 6: 58** (*37)* **Weighted Ave.: 56** (*37)*	**PVG 2: 61** (*43*) **PVG 5: 46** (*32*) **PVG 6: 56** (*44)* **Weighted Ave.: 55** (*41*)

Issue #2: *Watershed conditions and sediment rates may be altered due to the proposed activities for roads, vegetative treatments, and prescribed fire within the analysis area.*

Issue #3: *The number of roads selected for the Minimum Road System (MRS) and their maintenance level and location could affect sediment rates and long term watershed functionality.*

Issue 4: *Proposed activities may change timing and duration of peak runoff and increase bank instability in sensitive stream channels.*

Table S-18. Watershed Indicators for Direct and Indirect Effects – Comparison by Alternative.

	Watershed Condition Indicator (WCI)	Watershed Indicator for Direct and Indirect Effects	Alt A	Alt B	Alt C	Alt D	Alt E
Boulder Creek	Sediment	Maximum percent over natural sediment (BOISED)	4.5	14.0	8.9	15.0	14.0
		Cumulative percent difference total sediment yield over 15 years (BOISED)	0	52	8	60	84
		Long-term Annual percent over natural sediment yield (BOISED)	4.5	3.4	2.6	3.4	3.5
	Road Density/Location RCAs Floodplain Connectivity	Total miles of system road decommissioned	0	30	60	30	29
		Total miles unauthorized routes treated	0	12	15	12	12
		Total road density (mi/sq mi)	3.1	2.0	1.1	2.0	2.0
		Miles of road decommissioned within RCAs	0	10.6	17.1	10.6	10.5
	Change in peak flow and/or base flows	Number of drainages where there is an increase in the Channel Condition Risk	0	0	0	0	0
		Number of drainages that are over 25 percent ECA (High Category)	3	3	3	4	3
Lost Creek	**Watershed Condition Indicator (WCI)**	**Watershed Indicator for Direct and Indirect Effects**	**Alt A**	**Alt B**	**Alt C**	**Alt D**	**Alt E**
	Road Density/Location RCAs Floodplain Connectivity	Total miles of system road decommissioned	0	21	26	21	12
		Total miles of unauthorized routes treated	0	40	51	40	40
		Total road density (mi/sq mi)	6.9	5.3	4.8	5.3	5.5

		Miles of road decommissioned within RCAs	0	5.9	6.1	5.9	4.1
	Change in peak flow and/or base flows	Number of drainages where there is an increase in the Channel Condition Risk	0	0	0	0	0
		Number of drainages that are over 25 percent ECA (High Category)	5	5	5	5	5

Issue 5: *Treatments that propose thinning of vegetation in RCAs may negatively affect sediment delivery, stream temperatures and large woody debris (LWD).*

Table S-19. Acres of RCA vegetation treatments proposed in each alternative.

Subwatershed	Indicator					
	Total RCA Acres (Forest Service ownership)	Proposed Acres of RCA Vegetation Treatment				
		Alt A	Alt B	Alt C	Alt D	Alt E
Upper Weiser River	2118	0	416	0	422	417
Lost Creek	4,497	0	667	0	734	662
Upper West Fork Weiser River	2,394	0	579	0	621	496
Lower West Fork Weiser River	1,257	0	152	0	214	77
Total	**10,266**	**0**	**1,814**	**0**	**1,990**	**1,652**

Table S-20. Ares of RCA vegetation treatments proposed within 1 site potential tree height (120 feet) of intermittent stream channels.

Subwatershed	Total RCA Acres (Forest Service ownership)	Proposed Acres of RCA Vegetation treatment within 1 site potential tree height				
		Alt A	Alt B	Alt C	Alt D	Alt E
Upper Weiser River	2118	0	16	0	16	16
Lost Creek	4,497	0	111	0	119	103
Upper West Fork Weiser River	2,394	0	124	0	133	116
Lower West Fork Weiser River	1,257	0	3	0	3	0
Total	**10,266**	**0**	**254**	**0**	**271**	**235**

Issue 6: *Proposed activities may decrease long-term soil productivity and impair soil-hydrologic function.*

Table S-21. Comparison of alternatives for Soil Productivity issue.

Indicators	Alt A	Alt B	Alt C	Alt D	Alt E
Does the amount of Detrimental Disturbance (DD) within activity areas meet the Forest Plan requirement?	**Yes** No change from existing conditions from this project.	**Yes** No increase to DD due to design features and mitigation measures.	**Yes** No increase to DD due to design features and mitigation measures.	**Yes** No increase to DD due to design features and mitigation measures.	**Yes** No increase to DD due to design features and mitigation measures.
Does the amount of Total Soil Resource Commitment (TSRC) within the project area meet the Forest Plan requirement?	**Yes** 6.8%	**Yes** 5.9%	**Yes** 5.3 %	**Yes** 6.0%	**Yes** 6.0%

Issue 7: *Restoration treatments, while a benefit to white-headed woodpeckers, may adversely affect source habitat for other wildlife species, such as pileated woodpecker, northern goshawk, elk, and lynx, which are dependent on denser mixed-conifer forests with multi-layer structural characteristics.*

Table S-22. Change in white-headed woodpecker habitat by Alternative and Potential Vegetation Group (acres) short and long term combined.

	No Action	Alternative B		Alternative C		Alternative D		Alternative E	
PVG 1	342	1,595	+366%	1,554	+354%	1,600	+368%	1,496	+337%
PVG 2	304	9,444	+3,007%	8,114	+2,569%	9,557	+3,044%	8,879	+2,821%

	No Action	Alternative B		Alternative C		Alternative D		Alternative E	
PVG 3	---	---		---		---		---	
PVG 5	893	9,334	+945%	7,717	+764%	9,380	+950%	9,190	+929%
PVG 6	196	8,017	+3,990%	3,506	+1,689%	9,798	+4,899%	8,224	+4,096%
Totals	**1,735**	**28,390**	**+1,536%**	**20,891**	**+1,104%**	**30,335**	**+1,648%**	**27,789**	**+1,502%**

Issue 8: *Road densities affect wildlife (i.e., elk) security and can lead to the removal of important habitat components (snags) for cavity dependent wildlife.*

Table S-23. Proposed changes in road miles by Alternative for Upper Weiser River, West Fork Weiser, Middle Little Salmon River, 5th HUCs for the Lost Creek-Boulder Creek Project Area that may affect elk security.

Road Status (miles)	Alt B	Alt C	Alt D	Alt E
Decommission	68.8	132	68.8	51.4
Improve/Open	3.6	0	3.6	3.6
Long Term Closure	78.5	104.6	78.5	95.9
Maintain/Improve	254.2	227.4	302.1	302.1
New Long Term Closure	59.5	.75	11.6	11.6
Non-Motorized Travel	.7	0	.7	.7
Trail Conversion	11.5	11.9	11.5	11.5
Totals	~ 477	~ 477	~ 477	~ 477

Issue 9: *Project activities (logging, log haul, prescribed burning, and temporary road construction) may affect other wildlife species of concern, such as northern Idaho ground squirrel (NIDGS) and Canada lynx.*

Table S-24. Comparison of alternatives for Wildlife issue #9.

Indicators	Alt A	Alt B	Alt C	Alt D	Alt E
Quantity (acres) and quality of existing NIDGS habitat and acres treated to improve forage and population expansion.	-	Improve	Improve	Greatest acres improved	Less acres improved than Alt D, however more than Alt's B and C
Quantity and quality of existing Canada lynx habitat.	-	Same	Same	Same	Same

Issue 10: *Proposed activities to the road system (i.e. road closures and decommissioning) may reduce the amount of access to the areas identified in the Forest Plan for active management. Road access is needed for economical active management activities, including timber and biomass harvest, thinning, and fuels treatments.*

Table S-25. Suited Timber Lands within ¼ mile of a System Road (includes closed roads).

	Alt A	Alt B	Alt C	Alt D	Alt E
Acres	49,830	48,888	44,281	48,898	49,054
Change in Acres	0	-942	-5,549	-932	-776
% Change	0.0%	-1.9%	-11.1%	-1.9%	-1.6%

Table S-26. Suited Timber Lands within ¼ mile of Open System Road (includes Administrative use only roads).

	Alt A	Alt B	Alt C	Alt D	Alt E
Acres	45,125	39,525	36,263	43,840	43,480
Change in Acres	0	-5,600	-8,862	-1,285	-1,645
% Change	0.0%	-12.4%	-19.6%	-2.8%	-3.6%

Issue 11: *Project may change the existing recreational road and trail access in the Lost Creek/Boulder Creek watersheds.*

Table S-27. Comparison of alternatives for Recreation issue #11.

Indicators	Alt A	Alt B	Alt C	Alt D	Alt E
Miles of open motorized trail	18	18	18	18	18
Miles of open and managed non-motorized trails.	18	18	38	18	18
Miles of open road.	265	255	224	255	255

Issue 12: *Project activities may change the existing recreational dispersed camping opportunities in the Lost Creek and Boulder Creek subwatersheds.*

Table S-28. Comparison of alternatives for Recreation issue #12.

Indicators	Alt A	Alt B	Alt C	Alt D	Alt E
Change to dispersed recreation sites measured by number of sites provided and recreation facilities provided in the sites.	0 designated dispersed sites 0 new information kiosks 0 outhouses decommissioned 0 new vault toilets installed	68 designated dispersed sites 3 new information kiosks 6 outhouses decommissioned 7 new vault toilets installed	68 designated dispersed sites 3 new information kiosks 6 outhouses decommissioned 7 new vault toilets installed	68 designated dispersed sites 3 new information kiosks 6 outhouses decommissioned 7 new vault toilets installed	68 designated dispersed sites 3 new information kiosks 6 outhouses decommissioned 7 new vault toilets installed

Issue 13: *Costs associated with restoration activities under the proposed action are anticipated to exceed potential revenue generated over the life of the project. Although the proposed action would improve ecological health and function within the project area, the project may be perceived as economically inefficient from an accounting standpoint.*

Table S-29. Present Value of Lost Creek-Boulder Creek Treatments over 10-year Period, 4 Percent Discount Rate

	Alt B	Alt C	Alt D	Alt E
Timber Harvest & Required Design Criteria				
PV Costs	$15,327,370	$15,722,799	$16,885,984	$15,215,067
PV Revenue	$2,897,751	$1,502,427	$4,285,714	$3,905,339
Present Net Value	($12,429,619)	($14,220,372)	($12,600,271)	($11,309,728)
All Proposed Project Activities				
PV Costs	$24,827,354	$24,810,044	$26,385,968	$21,442,844
PV Revenue	$2,897,751	$1,502,427	$4,285,714	$3,905,339
Present Net Value	($21,929,603)	($23,307,618)	($22,100,254)	($17,537,504)

IDENTIFICATION OF PREFERRED ALTERNATIVE

The preferred alternative is Alternative B. The Responsible Official‘s selected alternative for implementation could be this alternative, one of the other alternatives considered in detail, or a different combination of the other alternatives considered in detail. The final decision will be documented in a record of decision (ROD) accompanying the Final EIS.